

computer activities are recited into the independent claims, the rejection under 35 U.S.C. §101 is overcome. Accordingly, all independent claims of the parent applications are amended with this direction and re-submitted in this FWC application. The specification is respectively amended to add more detail in the description of the pre-computer and post-computer activities to supported the amended set of claims. Various typo of the specification are also corrected to provide a better-presented patent when it is to be allowed.

In addition to the above mentioned direction, after discussing with the attorney representing the applicant to file the subject application in EPO, three additional claims are added as new claims 1 to 3. These new claims represents different approach to claim the improvement of the subject application based on the widely used fundamental table format technology disclosed in applicant's issued US Patent 5,867,818 and the corresponding UK Patent GB2306024 issued on August 24, 1999.

For the convenience of the examiner, the applicant respectfully submits that there is basically no new change in the fundamental matters in related to the parent application 09/169,462. Since the specification is enriched with the description of pre-computer and post-computer activities to support the agreed direction of claims; for the avoidance of doubt, the present application is submitted as a CIP application.

Discussion of **EACH** independent claim and how it is improved in accordance to the agreed direction of the telephone interview dated August 3, 1999 is respectfully presented as follow:

Claim 1:

Claims 1 is a newly added claim presented in the European rule of "Prior art plus characterized by improvement" format. The first six lines of the claim recites the configuration state table and the path table presented in the prior art parent application US Patent 5,867,818 and UK Patent GB2306024. The recited inter-related configuration table and path table constituting the Table Format programming method is now a well proven patentable subject matters widely used by many programming engineers worldwide. Evidence of application and publicity such as list of licensees and reference web sites (easyformat.com) had been previously submitted for the reference of the

examiner. The subsequent recitation of claim 1 starting from line 10 of page 25 represents the subsequent improvement of this well established, statutory subject matter. These improvements are the result of many years of further research after the Table Format programming technology was first introduced by the applicant in the US Patent 5,867,818. Accordingly, claim 1 recites the fundamental characteristics of an established, applicable and statutory technology plus the additional improvements. Therefore it should not be viewed as an abstract idea to be rejected under 35 U.S.C. §101. If this logical approach is not to be accepted, the examiner is respectfully requested to rebut the world recognized, logical European patent practice presented in claims 1 to 3 with evidence and supporting reasons.

Claims 4, 7, 29, 35, 63 and 90:

Each of these independent claims is enriched to recite the formation of a programming objective as a pre-computer activity, various table format programming activities are then interactively performed by the programmer during the programming process. As a result the computer delivers the programming objective as the post-computer activity. These claims are amended in accordance of the telephone interview with the examiner on August 3, 1999. The specification has been properly amended to support the inclusion of the pre-computer and post-computer activities into the subject claims.

Claim 44:

Claim 44 is a hardware claim which is quite simple in structure. This claim recites a combined dual processors (or more) apparatus characterized in that the first processor is configured for executing table format program which is defined in the specification. The second processor is just a regular processor configured to execute regular programs. The novelty of this claim is that the first processor is represented by the Table Format processor, such as the one disclosed in applicant's issued parent patent 5,867,818, and for it to be combined with another regular processor to perform other regular jobs. Since this is an apparatus claim, it should not be rejected by 35 U.S.C. §101. Applicant respectfully requests for evidence of prior art reference if this claim is to be rejected.

## Claim 50:

For the amended claim 50, the pre-computer and post-computer activities are all well addressed not only in the specification, but also in the claim per the telephone interview with the examiner dated August 3, 1999. There are numerous pre-computer activities. The typical one is to define the programming specification before the programming procedure. The result is generating and converting codes suitable to be executed by an external second computing device.

## Claim 69:

Step (1) of claim 69 requires the user to define the virtual qualifier, that is a first pre-computer process before any programming job can be started. Step (7) of claim 69 delivers a coded file executable by said computing apparatus. This code file is an output of the programming process that defines the post-computer result obtained.

## Claim 85:

The pre-computer activity is defined by the step to create and define the custom expression. The pre-computer activity is to equate said custom expressions with an official reference expression set interpretable by the computer. The post computer activity is to list the program listing with the selected expression set. The pre-computer and post-computer activities are thus recited in the claim as directed by the telephone interview with the examiner on August 3, 1999.

## Claim 91:

This claim corresponds to claim 88 of the parent application. The "means to access a communication link" recited in the amended claim 88 of the parent application is now amended to be a first computing apparatus connected with a second remote computing apparatus which are well described in the specification. This claim is an apparatus claim which should not be identified as an abstract concept. The examiner is respectfully to examine this claim based on the characteristics of the two computing apparatus as directed by the claim wording and the specification which clearly defines the table format programming method. It is submitted that the fundamental version of table format

programming method making use of the technology are disclosed in applicant's issued patents US Patent 5,867,818, UK Patent GB2306024 and the reference documentation of the licensee of Easy Format. Claim 91 adequately recites the characteristics of the fundamental table format programming technology and the improvement claimed.

During the telephone interview on August 3, 1999, the examiner indicates that the issued parent application is an independent patent application and has nothing to do the subject application. The examiner also query that how two or more tables of data can constitute a programming method and thus it is an abstract idea. The applicant wishes to take this opportunity to discuss this position. Firstly, the subject application was submitted right at the beginning that it is a Continuation In Part application of the now issued US Patent 5,867,818. According to MPEP, the parent application should be taken into reference in the examination process of this CIP application. The examiner has the responsibility to make sure that the claims submitted in the subject application does not constitute double patenting. Not only the parent application is to be taken into reference, more important, the technology disclosed in the parent US Patent 5,867,818 is now matured into a successful product which is licensed by six reputable micro-controller manufacturers and being considered by many other manufacturers. It is being used by thousands of programming engineers world wide. Evidence of this commercial success had been previously submitted for the reference of the examiner. Accordingly it is submitted that "in fact" table format programming is now a technology well know in the art, an established programming technology that is statutory.

Concerning the argument if two or more tables can constitute a statutory programming method; first of all, the applicant does not object that simply two or more tables of data does not constitute a programming method. Previously it was true that tables filled with data did not constitute a programming method, until the table programming method was first introduced in the issued US Patent 5,867,818. Close examination of the specification and the claims indicates that the tables of Table Format programming method are not just regular array of data. These tables are governed by some rules and instructions that the elements inside the tables are to be carefully filled in

accordance to the programming objective. The position of the elements inside the table tells the interaction between the configuration table and the path table. These interactions constitute the programmability, which, with a suitable compiler, is understandable by a computing apparatus. Therefore it can be executed by the computing apparatus according to the programming objective of the programmer. Accordingly the table format programming method bridges between the human being and the computing apparatus. It is a method, and also a “tool” for a programmer to program a computing apparatus.

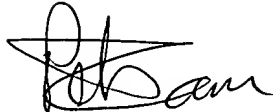
The attention of the examiner is now brought to a programming configuration which is now commonly used in the trade to program Easy Format supported micro-controllers (please refer to the web site [easyformat.com](http://easyformat.com) previously submitted to the examiner). A computer set up with an Easy Format compiler is input with a table format program targeted for a particular model of micro-controller. The function of the computer is to compile, or translate the table format program into machine codes executable by the target micro-controller. These machine codes are then embedded into the generic micro-controller by mask ROM, EPROM or flash memory. As a result, the micro-controller becomes a “programmed” controller to perform the desirable programming objective. This activity has been clearly disclosed in the specification. When we look into the computer compiling the table format program, the pre-computer activity is for the programmer to define the programming objective, and then to fill up the tables according to the programming rule which had been clearly defined in the specification. The post-computer result is a set of codes executable by the micro-controller external to the compiler computer. Thus a physical transformation is identified. When we looked into the action of the micro-controller, a generic micro-controller. Before programming it is only a piece of dump silicon. The table format compiled codes brings in executable instructions that directs the original passive micro-controller to perform according to the programming objectives of the programmer. Thus physical transformation is observed in the aspect of the micro-controller. Accordingly the programmability characteristics of table format programmed tables, which are very different when compared with the regular data tables, are identified. Therefore the well-characterized tables of table format programming should not be classified as abstract ideas, in view of the abundant supporting evidence submitted and the great success it has in the field.

It is important to note that the table format programming technology successfully changed the tradition view that tables are only for data, that is non-statutory. It really depends on how the table is originated and formulated. This is also the beautiful part of the invention process. As it is named, creative invention changes the tradition looking of matters. As the patent system is designed to encourage invention, we should look carefully into the fundamental elements how the matters is changed by the invention, rather than drawing a conclusion according to tradition wisdom that tables are all data and therefore are abstract ideas. If tables are carefully programmed by programmers in accordance to the rules and characteristics of the table format programming method disclosed in the specification and characterized in the claims, they are absolutely real working programming method and not abstract ideas. This is proven by the great success of Easy Format programming in the field. In fact, considerable tax revenues submitted to the U.S. government are being generated from the royalty received by licensing the invented table format or Easy Format technology.

The subject application summarized the subsequent improvements of the fundamental table format technology invented four years ago. It came from the result of three years of intense research targeted to extend the servicing scope of the fundamental technology. The examiner is respectfully solicited to consider allowance of the application in accordance to all the evidence and remarks submitted. If rejection is to be withheld, the examiner is respectfully requested to provide evidence why the widely successful fundamental table format programming method is non-statutory, and why the improvements of a widely used fundamental table programming method is not statutory.

Since patentable and practical applications in the technology art are identified and agreed, the modification of the claims to overcome the 35 USC §101 rejection is a matter of formality. The Applicant hereby respectfully requests the Examiner to propose broadest allowable claim or specification amendment to the application pursuant to MPEP 707.07(j) if further amendment to any claim is required for the application to be allowed.

Respectfully submitted by,



Peter Lam

Applicant  
20104 Wayne Ave.,  
Torrance, CA 90503.

Telephone: (310) 320-9811

Fax: (310) 320-9812

**Express Mail Label #:** EH 474629426 US

I hereby certify that this correspondence is being deposited with the United States Postal Service as "Express Mail Post Office to Addressee" service under 37 CFR 1.10 in an envelope addressed to: Box FWC, Commissioner of Patents and Trademarks, Washington, D.C. 20231, on October 16, 1999.



Peter Ar-Fu Lam

094487626 474626